



Fact Sheet

US Army Corps of Engineers
U.S. Army Engineer Research and Development Center

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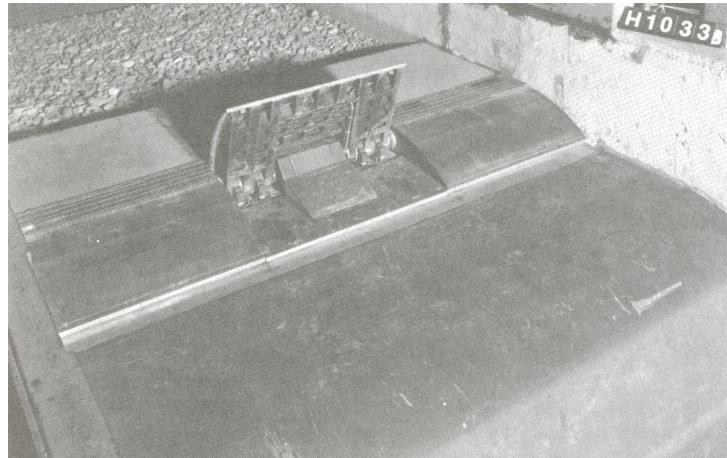
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Montgomery Point Lock and Dam Gate Study

Purpose: To determine the hydraulic loadings/ forces on the gated spillway. It was also used to evaluate the hydraulic performance of the spillway, debris circulation potential downstream of the spillway and to design riprap protection near the spillway.

Background: The proposed Montgomery Point Lock and Dam will be located near the mouth of the White River. This portion of the White River is known as the White River Entrance Channel, and is the initial segment of the McClellan-Kerr Arkansas River Navigation System. The project will consist of a 670-ft long by 110-ft wide navigation lock, a 300-ft wide controlled navigation pass spillway, and a 200- wide fixed uncontrolled overflow spillway.

Facts: At the request of the U.S. Army Engineer District, Little Rock, a 1:15 scale physical model was designed and constructed at the U.S. Army Engineer Research and Development Center by the Coastal and Hydraulics Laboratory. The model reproduces a three-gate section of the navigable pass spillway and sufficient upper pool and tailrace length to reproduce prototype flow conditions near the spillway. The model was used to evaluate the spillway gate design, provide hydraulic loadings for gate hoist machinery and evaluate spillway performance.



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